



Initiation of a Proceeding to Investigate Approaches to Mitigate Solar Development Volatility pursuant to N.J.S.A. 48:3-87(d)(3)(a)

Charlie Garrison

April 9, 2013

Renewable Energy Meeting

Trenton, NJ



Solar Installed Capacity Data

- The installed solar capacity as of 3/31/13 is approximately 1,026 MW.
 - Approximately 18 MW installed in current month.
- The preliminary solar capacity project pipeline as of 3/31/13 is approximately 702 MW.
 - The project pipeline increased approximately .1 MW in the current month.



NJCEP Solar Installed Projects Plus Pipeline Projects

Installed Solar Projects As of 3/31/13				
Interconnection Type	Project Qty	Total Capacity (KW DC)	Percent of Capacity	Avg System Size (kW DC)
Behind the meter	20,792	830,845.8	81.0%	40.0
Direct Grid Supply	95	195,346.6	19.0%	2,056.3
Installed Totals	20,887	1,026,192.5	100.0%	49.1
Solar Project Pipeline As of 3/31/13				
Interconnection Type	Project Qty	Total Capacity (KW DC)	Percent of Capacity	Avg System Size (kW DC)
Behind the meter	4,726	204,303.4	29.1%	43.2
Direct Grid Supply	49	497,887.1	70.9%	10,161.0
Pipeline Totals	4,775	702,190.5	100.0%	147.1
Totals For All Projects	25,662	1,728,382.9		67.4
Preliminary Values				



NJCEP Solar Pipeline Plus Installed Projects History

NJCEP Solar Pipeline Plus Installed Projects History as of 3/31/13			
As Of	MW Installed	MW Pipeline	Combined MW
11/30/2011	531.7	599.4	1,131.1
12/31/2011	565.9	618.7	1,184.6
1/31/2012	649.9	548.0	1,197.1
2/29/2012	688.3	542.3	1,231.4
3/31/2012	730.0	526.1	1,256.5
4/30/2012	770.0	510.0	1,280.0
5/31/2012	802.8	560.7	1,363.5
6/30/2012	831.9	590.3	1,422.2
7/31/2012	852.6	756.2	1,608.8
8/31/2012	876.1	806.9	1,683.0
9/30/2012	900.9	740.0	1,640.9
10/31/2012	918.1	738.9	1,657.0
11/30/2012	943.2	750.3	1,693.5
12/31/2012	955.6	744.4	1,700.0
1/31/2013	973.4	731.6	1,705.0
2/28/2013	1,008.4	702.1	1,710.6
3/31/2013	1,026.2	702.2	1,728.4

Preliminary values for 3/31/13

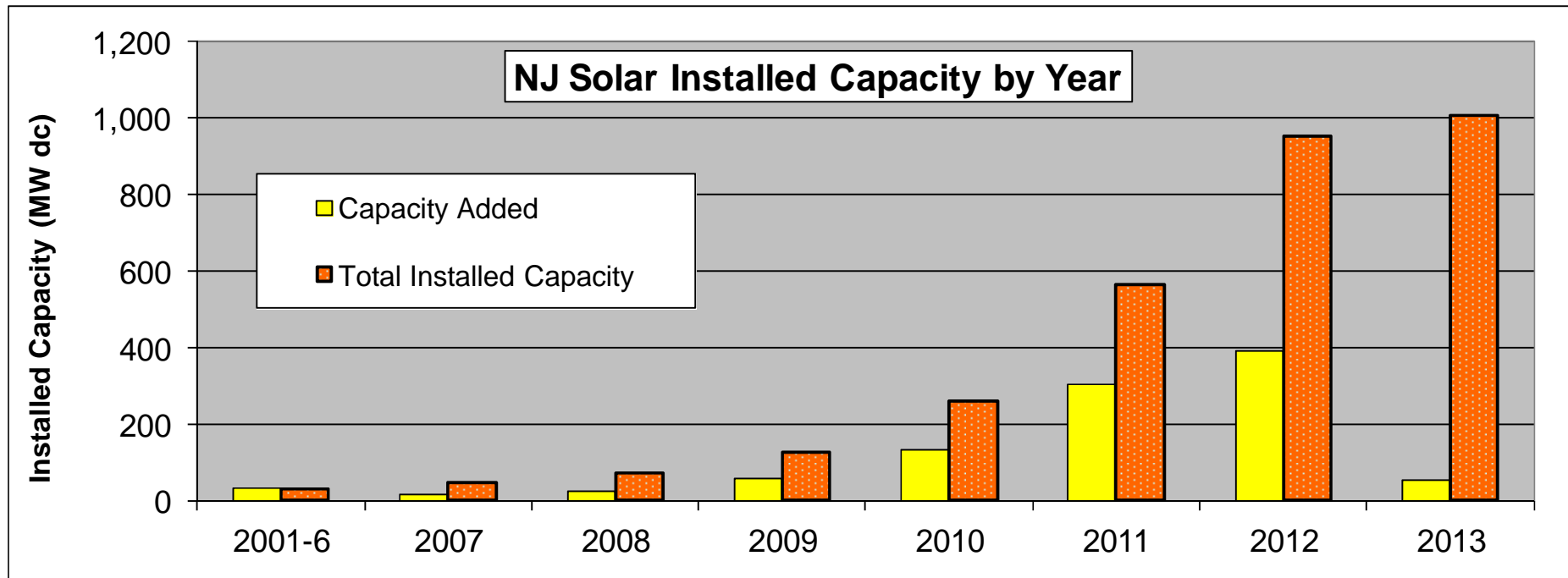


New Jersey Solar Installations by Year As of 02/28/13

Year	# Projects	Total kW	Total Rebate \$
2001	3	7.5	\$ 37,145
2002	37	623.5	\$ 2,424,694
2003	95	1,176.6	\$ 5,323,411
2004	289	2,037.1	\$ 10,581,975
2005	729	9,908.1	\$ 46,235,897
2006	867	18,320.4	\$ 78,086,786
2007	693	15,258.3	\$ 58,122,386
2008	833	22,711.3	\$ 44,923,416
2009	1,349	57,254.3	\$ 56,026,262
2010	3,131	132,383.4	\$ 45,961,190
2011	5,397	305,207.2	\$ 13,394,332
2012	5,901	390,646.9	\$ 2,394,540
2013	1,016	52,881.6	\$ 1,898
Total	20,340	1,008,416.1	\$ 363,513,932



Solar Installed Capacity



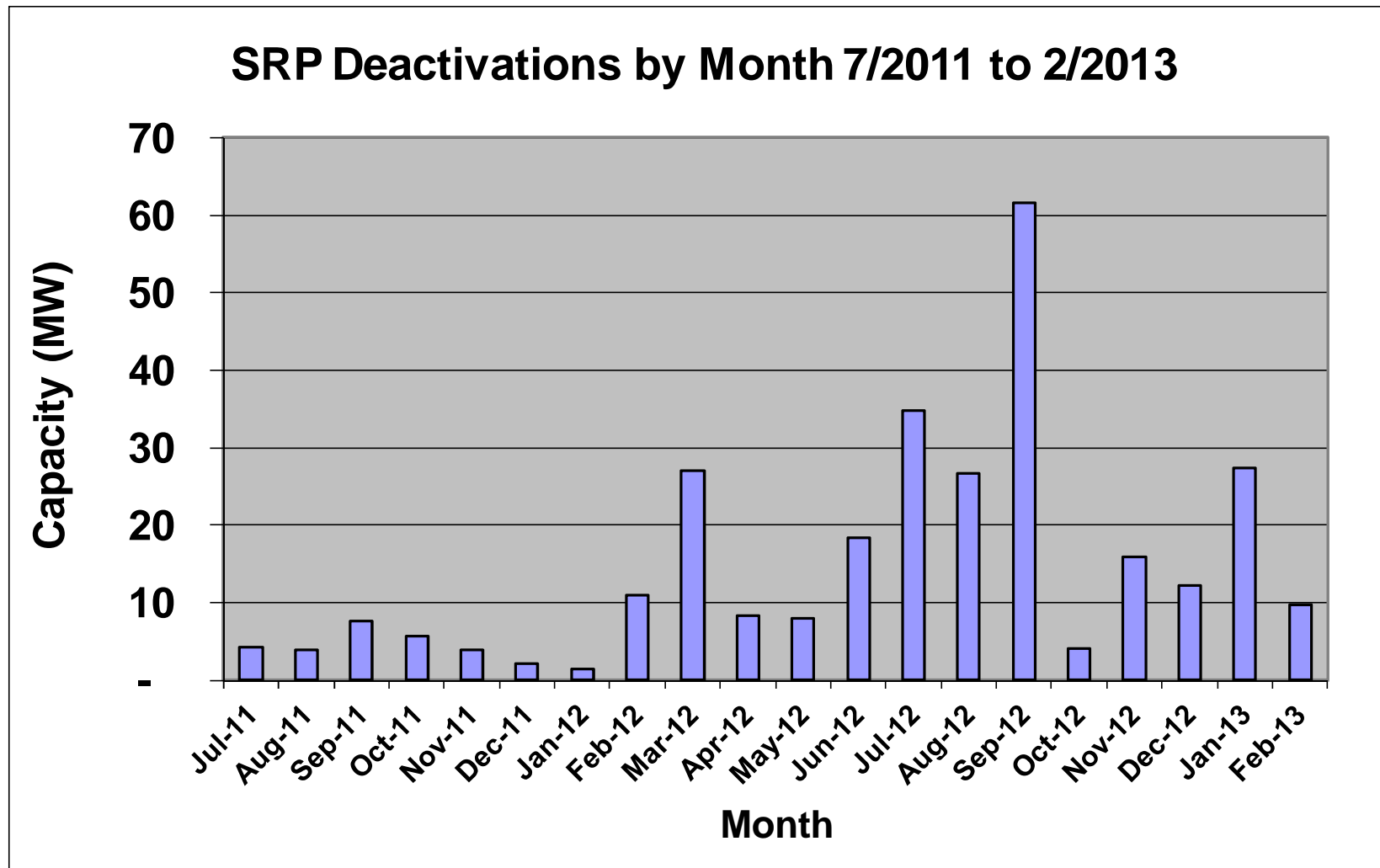


SRP Deactivations by Month

Year	Month End	Project Qty	Capacity (kW)
2011	Dec-11	73	2,098
2012	Jan-12	31	1,362
2012	Feb-12	75	11,034
2012	Mar-12	148	26,946
2012	Apr-12	112	8,291
2012	May-12	129	7,898
2012	Jun-12	107	18,306
2012	Jul-12	217	34,830
2012	Aug-12	142	26,592
2012	Sep-12	339	61,590
2012	Oct-12	30	4,083
2012	Nov-12	346	15,917
2012	Dec-12	136	12,202
2013	Jan-13	133	27,292
2013	Feb-13	145	9,779



SRP Deactivations by Month





NJCEP Solar Installed Projects Plus Pipeline Projects

Installed Solar Projects as of 2/28/13				
Interconnection Type	Qty	System Size (kW)	Percent	Avg System Size (kW)
Behind the meter	20,245	813,069.5	80.6%	40.2
Direct Grid Supply	95	195,346.6	19.4%	2,056.3
Totals	20,340	1,008,416.1	100.0%	49.6
Solar Project Pipeline as of 2/28/13				
Interconnection Type	Qty	System Size (kW)	Percent	Avg System Size (kW)
Behind the meter	4,834	204,250.7	29.1%	42.3
Direct Grid Supply	49	497,887.1	70.9%	10,161.0
Totals	4,883	702,137.9	100.0%	143.8
Totals For All Projects	25,223	1,710,554.0		67.8



NJCEP Solar Generation Forecast

This data is provided for informational purposes only. Past levels of installed capacity rates are not predictive of future values, and any persons considering investment in the solar market should perform their independent due diligence.



NJCEP Solar Installed Capacity Forecast - As of 2/28/13

Cumulative Installed Capacity (MW dc)

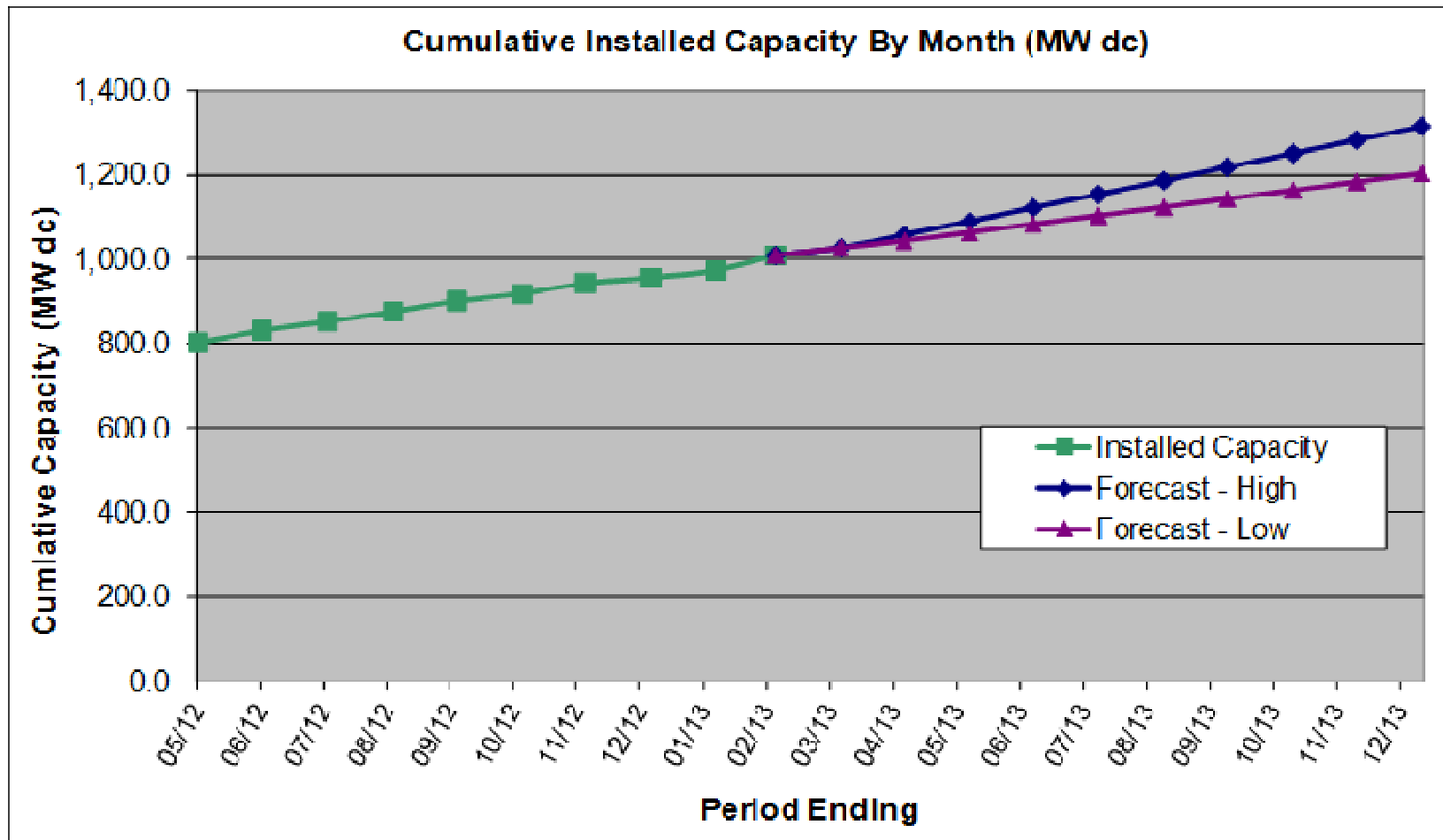
End Date	05/31/12	06/30/12	07/31/12	08/31/12	09/30/12	10/31/12	11/30/12	12/31/12	01/31/13	02/28/13	03/31/13	04/30/13	05/31/13
Forecast - Low	802.8	831.8	852.7	876.0	900.8	918.1	943.1	955.5	973.0	1,008.4	1,026.2	1,043.2	1,063.2
Forecast - High	802.8	831.8	852.7	876.0	900.8	918.1	943.1	955.5	973.0	1,008.4	1,026.2	1,057.2	1,089.4

The 1,008.4 MW of solar capacity installed as of 02/28/13 and the additionally forecast installed solar capacity for the remainder of Energy Year 2013 is estimated to be capable of producing approximately 1,112,100 to 1,113,700 SRECs during Energy Year 2013.

This data is provided for informational purposes only. Past levels of installed capacity rates are not predictive of future values, and any persons considering investment in the solar market should perform their independent due diligence.



NJCEP Solar Installed Capacity Forecast - As of 2/28/13





NJCEP Solar Generation Forecast

RPS Requirement By Energy Year

Energy Yr	RPS Req	Status
2012	442,000	Actual
2013	596,000	Actual
2014	1,660,500	Estimated
2015	1,984,500	Estimated
2016	2,227,500	Estimated

Energy Yr	Retail Sales Est (MWh)	RPS %	Est RPS Req (MWh)
2014	81,000,000	2.05%	1,660,500
2015	81,000,000	2.45%	1,984,500
2016	81,000,000	2.75%	2,227,500

Note: The Retail Sales estimates shown above were used to estimate RPS MWh requirement for EY 2014-2016



NJCEP Solar Generation Forecast

NJCEP Solar Generation Forecast

Assumptions used in forecast of annual capacity added for each EY

EY	Est Capacity Added (kW/Yr)			BTM Monthly Run Rate (kW/Month)			Estimated Annual Grid Supply Capacity Added (kW/Yr)		
	Low	Med	High	Low	Med	High	Low	Med	High
EY2014	240,051	358,340	386,040	15,338	24,445	25,420	56,000	65,000	81,000
EY2015	254,051	368,340	401,800	15,338	24,445	26,400	70,000	75,000	85,000
EY2016	265,051	381,340	423,560	15,338	24,445	27,380	81,000	88,000	95,000

Capacity added each year = (12 months x BTM monthly run rate) + annual grid supply added

Low, Med, High Assumptions used in forecast of annual capacity added for each EY:

Low	Based upon 4 year historical run rate for BTM installs plus annual additions from grid supply table above
Med	Based upon 1 year historical run rate for BTM installs plus annual additions from grid supply table above
High	Based upon 1 year historical run rate for BTM installs with 4% growth per year plus annual additions from grid supply table above



NJCEP Solar Generation Forecast Summary By Energy Year - As of 2/28/13

Energy Yr	Item	Low	Med	High
EY2012 (Actual)	GATS Cert by Resource Eligibility	713,879	713,879	713,879
	SRECs Retired (MWh)	438,904	438,904	438,904
	% of RPS Requirement	161.5%	161.5%	161.5%
	SREC Carryover (MWh)	274,975	274,975	274,975
	Equivalent Capacity (MW)	229.1	229.1	229.1
EY2013	Est Capacity Added (MW/EY)	273.2	278.2	287.2
	Est Generation (MWh/EY)	1,112,100	1,112,700	1,113,700
	Carryover From Prior Years (MWh)	274,975	274,975	274,975
	Est Avail (MWh)	1,387,075	1,387,675	1,388,675
	RPS Req (MWh)	596,000	596,000	596,000
	% of RPS Requirement	232.7%	232.8%	233.0%
	SREC Carryover (MWh)	791,075	791,675	792,675
	Equivalent Capacity (MW)	659.2	659.7	660.6
EY2014	Est Capacity Added (MW/EY)	240.1	358.3	386.0
	Est Generation (MWh/EY)	1,406,900	1,489,300	1,518,000
	Carryover From Prior Years (MWh)	791,075	791,675	792,675
	Est Avail (MWh)	2,197,975	2,280,975	2,310,675
	RPS Req (MWh)	1,660,500	1,660,500	1,660,500
	% of RPS Requirement	132.4%	137.4%	139.2%
	SREC Carryover (MWh)	537,475	620,475	650,175
	Equivalent Capacity (MW)	447.9	517.1	541.8

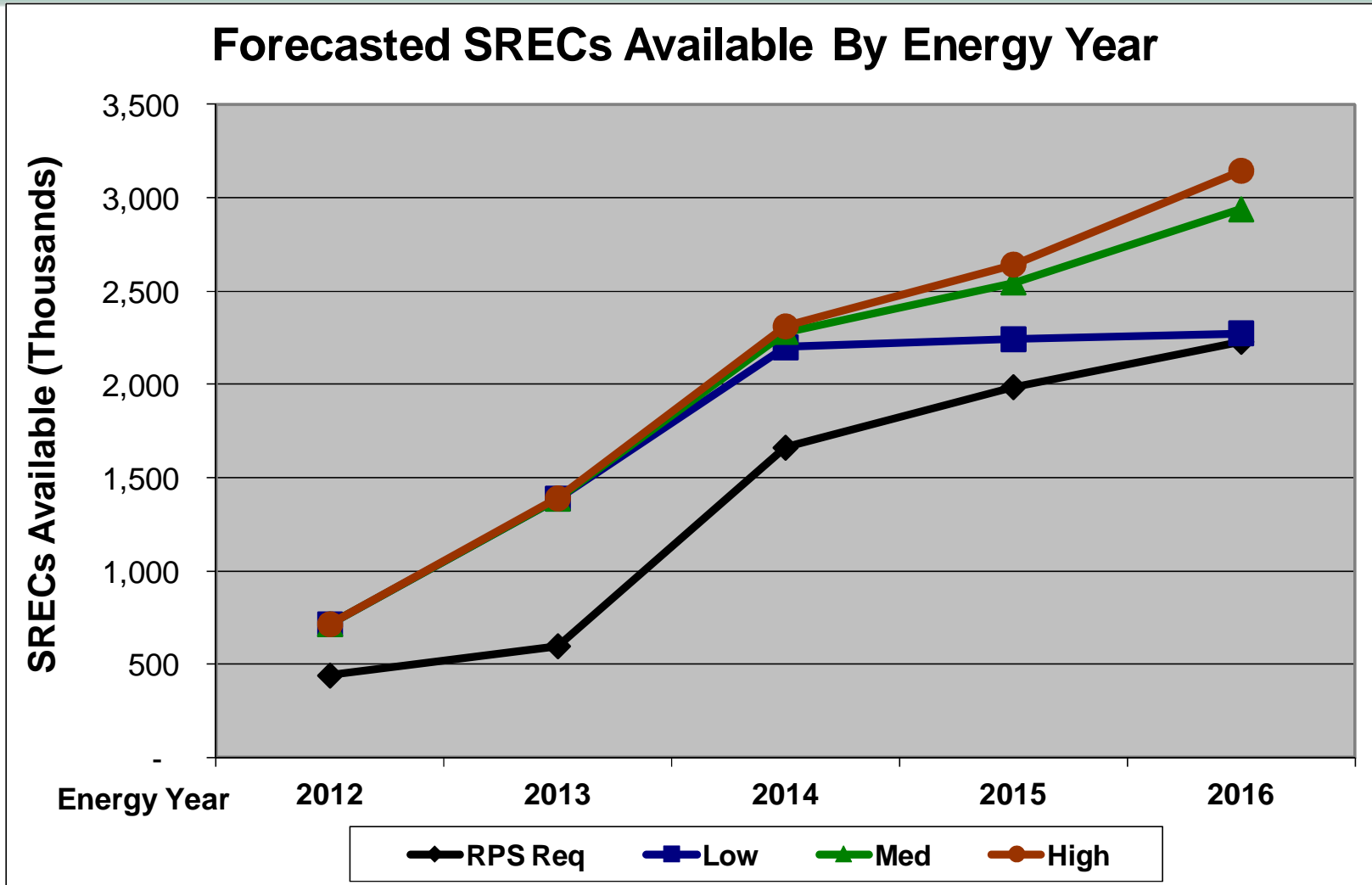


NJCEP Solar Generation Forecast Summary By Energy Year - As of 2/28/13

Energy Yr	Item	Low	Med	High
EY2015	Est Capacity Added (MW/EY)	254.1	368.3	401.8
	Est Generation (MWh/EY)	1,704,000	1,925,800	1,991,400
	Carryover From Prior Years (MWh)	537,475	620,475	650,175
	Est Avail (MWh)	2,241,475	2,546,275	2,641,575
	RPS Req (MWh)	1,984,500	1,984,500	1,984,500
	% of RPS Requirement	112.9%	128.3%	133.1%
	SREC Carryover (MWh)	256,975	561,775	657,075
	Equivalent Capacity (MW)	214.1	468.1	547.6
EY2016	Est Capacity Added (MW/EY)	265.1	381.3	423.6
	Est Generation (MWh/EY)	2,016,000	2,376,200	2,487,600
	Carryover From Prior Years (MWh)	256,975	561,775	657,075
	Est Avail (MWh)	2,272,975	2,937,975	3,144,675
	RPS Req (MWh)	2,227,500	2,227,500	2,227,500
	% of RPS Requirement	102.0%	131.9%	141.2%
	SREC Carryover (MWh)	45,475	710,475	917,175
	Equivalent Capacity (MW)	37.9	592.1	764.3



NJCEP Solar Generation Forecast





Current SREC Trading Statistics Energy Year 2013

Current SREC Trading Statistics Energy Year 2013

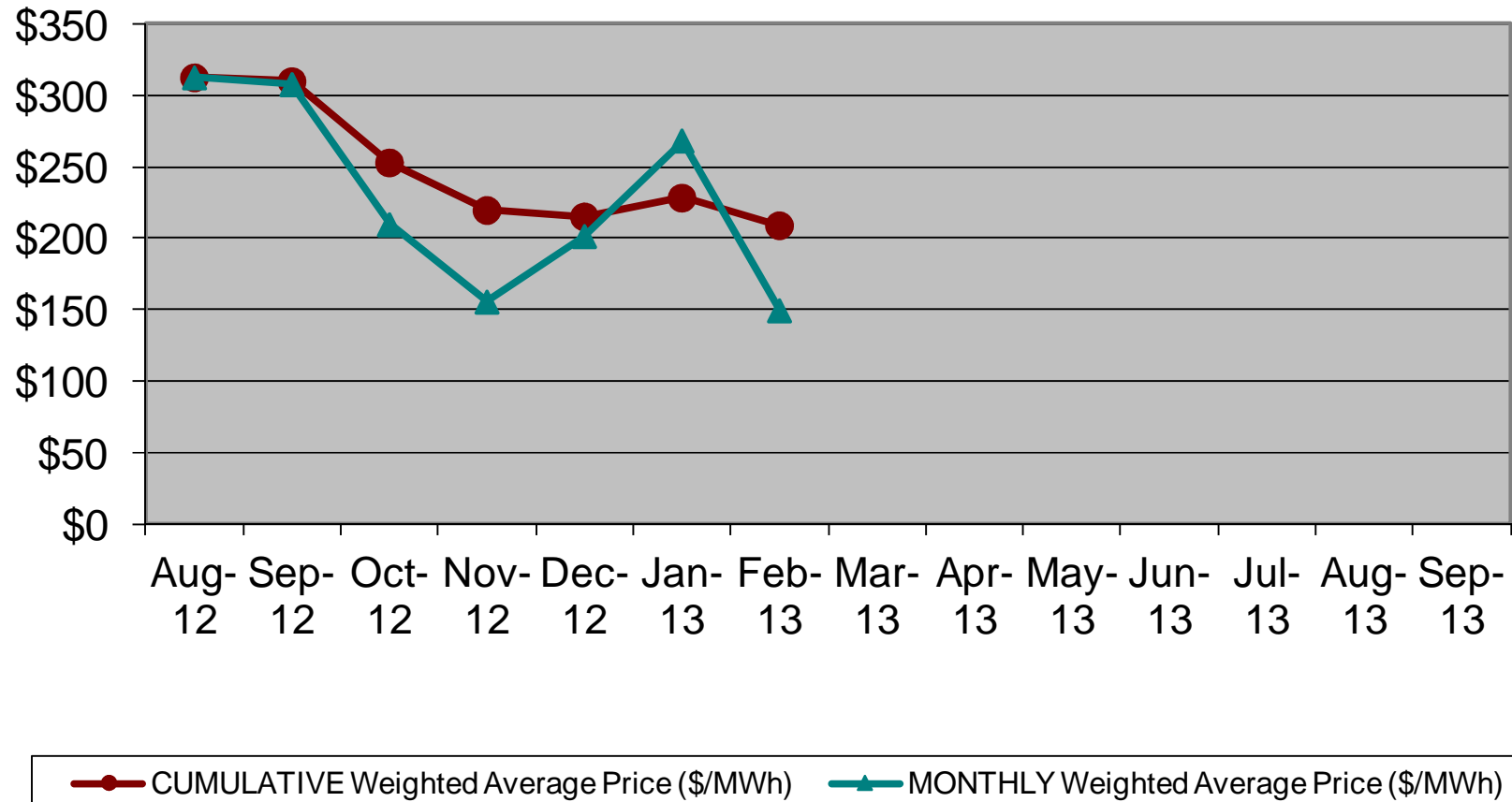
For SRECs from electricity produced June 1, 2012 – May 31, 2013. Includes transactions during the true-up period.

EY 2013 SACP= \$641			SREC Quantity		Monthly		Cumulative	
Month	Year	Active kW DC	Issued in Month	Traded in Month	High (\$/MWh)	Low (\$/MWh)	# of SRECs Traded	Weighted Avg Price (\$/MWh)
Mar	2013							
Feb	2013	932,321	55,612	126,630	\$ 620	\$ 40	516,675	\$208.88
Jan	2013	921,267	47,648	96,603	\$ 641	\$ 40	390,045	\$228.20
Dec	2012	898,173	65,933	72,070	\$ 620	\$ 40	293,442	\$215.06
Nov	2012	886,632	60,244	75,602	\$ 658	\$ 60	221,372	\$219.56
Oct	2012	866,979	90,783	82,813	\$ 658	\$ 40	145,770	\$252.81
Sept	2012	850,872	106,498	34,124	\$ 650	\$ 50	62,957	\$309.77
Aug	2012	836,066	101,993	21,510	\$ 620	\$ 50	28,833	\$312.37
Jul	2012	814,656	95,855	7,323	Due to low trade volume, the July trades are reported with the pricing data for August.			
	Total		624,566	516,675				



Current SREC Trading Statistics Energy Year 2013

NJ SREC Trading Price - Energy Year 2013 (SACP = \$641)





For More Information

Subscribe to the Renewable Energy Committee Notification list

<http://mail.njcleanenergy.com/mailman/listinfo/Renewables>

New Jersey Clean Energy Program Renewable Energy Reports

<http://www.njcleanenergy.com/renewable-energy/project-activity-reports/project-activity-reports>

<http://www.njcleanenergy.com/renewable-energy/project-activity-reports/program-status-reports/program-status-reports>

NJ SREC Trading Statistics for each Energy Year

<http://www.njcleanenergy.com/renewable-energy/project-activity-reports/srec-pricing/srec-pricing>